Visible Light-Activatable Platinum(IV) Prodrugs Harnessing CD36 for Ovarian Cancer Therapy

Amarasooriya M. D. S. Jayawardhana, a Srijana Bhandari, Ariela W. Kaspi-Kaneti, Man Kshetri, Zihan Qiu, May Cheline, Hao Shen, Barry Dunietz, and Yao-Rong Zheng, Barry Dunietz, and Yao-Rong Zheng, Ariela W. Kaspi-Kaneti, Man Kshetri, Ariela W. Kaspi-Kaneti, Ariela W. Kaspi-Kaneti, Man Kshetri, Ariela W. Kaspi-Kaneti, Man Kshetri, Ariela W. Kaspi-Kaneti, Ariela W. Kaspi-Kaneti, Man Kshetri, Ariela W. Kaspi-Kaneti, Man Kshetri, Ariela W. Kaspi-Kaneti, Ariela W. Kaspi-Kaneti, Man Kshetri, Ariela W. Kaspi-Kaneti, Man Kshetri, Ariela W. Kaspi-Kaneti, Ariela W. Kaspi-Kaneti, Man Kshetri, Ariela W. Kaspi-Kaneti, Ariela W. Kaspi-Kaneti,

- a. Department of Chemistry and Biochemistry, Kent State University, Kent, OH 44242.
- b. University of La Verne, 1950 3rd Street, La Verne, CA 91750

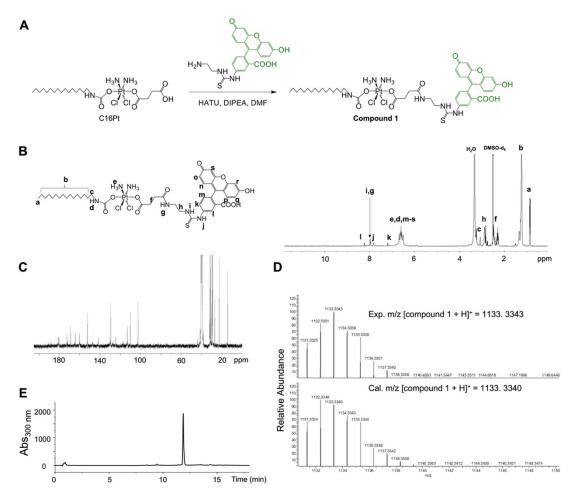


Fig S1. Synthesis and characterization of the photoactivatable Pt (IV) prodrug (1): **A.** Synthetic route for preparing the Pt(IV) prodrug; **B.** ¹H NMR spectrum in DMSO-d₆; **C.** ¹³C NMR spectrum in DMSO-d₆; **D.** High resolution ESI-MS spectrum; **E.** Analytic HPLC analysis (Gradient: 0 min 5% B, 5 min 5% B, 12 min 95% B, 15 min 95% B, 18 min 5% B. solvent A is 0.1% TFA aqueous solution and B is acetonitrile).

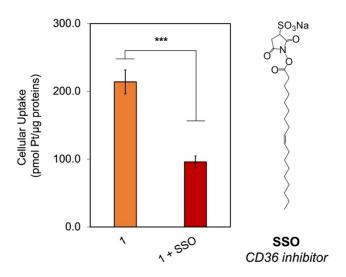


Fig S2. Cellular uptake of 1 ([Pt] = $10 \mu M$, 4 h) against the A2780cis cells without (*left*) and with (*right*) the pre-treatment of SSO ($200 \mu M$, 0.5 h).

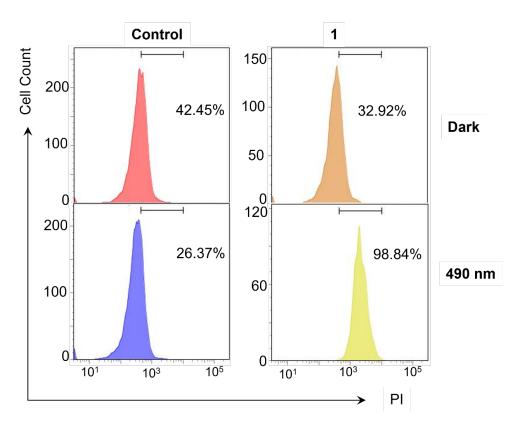


Fig S3. Flow cytometric analysis of cell death of the A2780cis cells treated with 1 (20 μ M, 6 h) in the absence (Dark) or presence (490 nm) of 20-min irradiation by 490 nm light (2.36 mW/cm²).

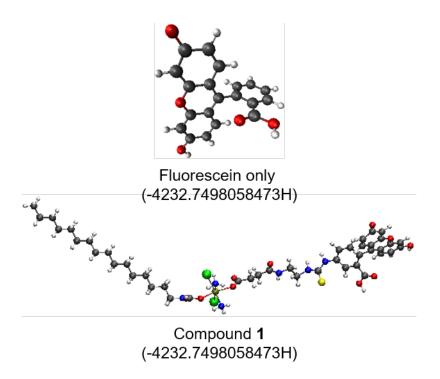


Fig S4. Optimized ground state geometries and respective energies of fluorescein and Compound 1.